

R E M A R K S

Reconsideration of this application, as amended, is respectfully requested.

THE CLAIMS

Claims 1-3 and 9 have been amended to more clearly recite the distinguishing features of the present invention, as well as to make some minor grammatical improvements and to correct some minor antecedent basis problems so as to put them in better form for issuance in a U.S. patent.

In addition, claims 4-8, 10 and 11 have been canceled, without prejudice.

No new matter has been added, and it is respectfully requested that the amendments to the claims be approved and entered.

THE PRIOR ART REJECTION

Claims 9 was rejected under 35 USC 102 as being anticipated by USP 6,763,140 ("Skoll"), and claims 1-3 were rejected under 35 USC 103 as being obvious in view of Skoll. These rejections, however, are respectfully traversed with respect to the claims as amended hereinabove.

According to the present invention as recited in amended independent claim 1, a microscopic image capture apparatus is provided which comprises a low magnification optical system and a

high magnification optical system, a macro image capture unit which captures an image of wide-angle view of an entire observing slide by the low magnification optical system, and a sample image area extraction unit which extracts a sample image area including a sample image from the image of wide-angle view captured by the macro image capture unit. In addition, as recited in amended independent claim 1, a height coordinate acquisition position setting unit is provided to automatically set a plurality of positions in an XY direction in which a height coordinate Z is acquired from the sample image area extracted by the sample image area extraction unit, a replacing unit is provided to replace the low magnification optical system with the high magnification optical system, and a coordinate read unit is provided to read a height coordinate of a focal point position of the high magnification optical system in each of the positions in the XY direction set by the height coordinate acquisition position setting unit. Still further, as recited in amended independent claim 1, a focal point adjusted position computation unit is provided to compute an adjusted position of a focal point in an arbitrary position in the sample image area using height coordinate data read by the coordinate read unit at the positions set by the height coordinate acquisition position setting unit, and a sample travel unit is provided to transfer a height of a sample to the adjusted focal position computed by the focal point

adjusted position computation unit when the sample is horizontally traveled.

Similarly, according to the method of the present invention as recited in amended independent claim 9, a microscopic image capturing method is provided which comprises extracting a sample image area including a sample image from an image of wide-angle view of an observing slide captured by a low magnification optical system, setting a plurality of horizontal positions in which a height coordinate Z is acquired from the extracted sample image area, reading a height coordinate which is a focal point position of a high magnification optical system in each of the set horizontal positions, computing an adjusted position of a focal point in an arbitrary position in the sample image area using the set horizontal positions and height coordinate data read in the set horizontal positions, and transferring a height of a sample to the computed adjusted focal position when the sample is horizontally traveled.

With the structure and method of the present invention as recited in amended independent claims 1 and 9, the time required to extract a sample image area in the observing slide by the low magnification optical system can be shortened, and further, a time required to obtain the entire image of a sample can be shortened by reducing the number times autofocus needs to be executed.

It is respectfully submitted that Skoll does not at all disclose, teach or suggest extracting a sample image area including a sample image from an image of wide-angle view of an observing slide captured by a low magnification optical system, setting a plurality of horizontal positions in which a height coordinate Z is acquired from the extracted sample image area, and reading a height coordinate which is a focal point position of a high magnification optical system in each of the set horizontal positions, as according to the claimed present invention.

Accordingly, it is respectfully submitted that the present invention as recited in amended independent claims 1 and 9, and claims 2-3 depending from amended independent claim 1, clearly patentably distinguishes over Skoll, taken singly or in combination with any of the other prior art references of record, under 35 USC 102 as well as under 35 USC 103.

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In view of the foregoing, entry of this Amendment, allowance of the claims and the passing of this application to issue are respectfully solicited.

Application Serial No. 10/723,573
Response to Office Action

Customer No. 01933

If the Examiner has any comments, questions, objections or recommendations, the Examiner is invited to telephone the undersigned at the telephone number given below for prompt action.

Respectfully submitted,

/Douglas Holtz/

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